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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/705,911	11/06/2000	John Hermon-Taylor	117-323	7604

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EXAMINER

ZEMAN, ROBERT A

ART UNIT	PAPER NUMBER
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1645

DATE MAILED: 08/23/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/705,911

Applicant(s)

HERMON-TAYLOR ET AL.

Examiner

Robert A Zeman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-15 and 18-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1,4-15 and 18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

-DETAILED ACTION

The amendment filed on 11-6-2000 is acknowledged. Claims 4, 8-10, 12-15, and 18-21 have been amended. Claims 2-3 and 16-17 have been canceled.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:6, classified in class 530, subclass 350.
2. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:8, classified in class 530, subclass 350.
3. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:10, classified in class 530, subclass 350.
4. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:12, classified in class 530, subclass 350.
5. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:14, classified in class 530, subclass 350.
6. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:16, classified in class 530, subclass 350.
7. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:18, classified in class 530, subclass 350.
8. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:20, classified in class 530, subclass 350.

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9. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:22, classified in class 530, subclass 350.
10. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:24, classified in class 530, subclass 350.
11. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:26, classified in class 530, subclass 350.
12. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:28, classified in class 530, subclass 350.
13. Claims 1 and 12, drawn to a polypeptide comprising SEQ ID NO:29, classified in class 530, subclass 350.
14. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:5, classified in class 536, subclass 23.7.
15. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:7, classified in class 536, subclass 23.7.
16. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:9, classified in class 536, subclass 23.7.
17. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:11, classified in class 536, subclass 23.7.
18. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:13, classified in class 536, subclass 23.7.
19. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:15, classified in class 536, subclass 23.7.

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20. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:17, classified in class 536, subclass 23.7.
21. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:19, classified in class 536, subclass 23.7.
22. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:21, classified in class 536, subclass 23.7.
23. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:23, classified in class 536, subclass 23.7.
24. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:25, classified in class 536, subclass 23.7.
25. Claims 4-7, 9 and 12, drawn to a polynucleotide comprising SEQ ID NO:27, classified in class 536, subclass 23.7.
26. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:5, classified in class 536, subclass 24.32.
27. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:7, classified in class 536, subclass 24.32.
28. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:9, classified in class 536, subclass 24.32.
29. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:11, classified in class 536, subclass 24.32.
30. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:13, classified in class 536, subclass 24.32.

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31. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:15, classified in class 536, subclass 24.32.
32. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:17, classified in class 536, subclass 24.32.
33. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:19, classified in class 536, subclass 24.32.
34. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:21, classified in class 536, subclass 24.32.
35. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:23, classified in class 536, subclass 24.32.
36. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:25, classified in class 536, subclass 24.32.
37. Claims 8 and 12, drawn to a polynucleotide probe comprising a fragment of at least 15 nucleotides of SEQ ID NO:27, classified in class 536, subclass 24.32.
38. Claims 10, and 12 drawn to an antibody that binds a polypeptide comprising SEQ ID NO:6, classified in class 530, subclass 387.1.
39. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:8, classified in class 530, subclass 387.1.
40. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:10, classified in class 530, subclass 387.1.
41. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:12, classified in class 530, subclass 387.1.

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42. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:14, classified in class 530, subclass 387.1.
43. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:16, classified in class 530, subclass 387.1.
44. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:18, classified in class 530, subclass 387.1.
45. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:20, classified in class 530, subclass 387.1.
46. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:22, classified in class 530, subclass 387.1.
47. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:24, classified in class 530, subclass 387.1.
48. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:26, classified in class 530, subclass 387.1.
49. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:28, classified in class 530, subclass 387.1.
50. Claims 10, and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:29, classified in class 530, subclass 387.1.
51. Claims 11 and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:31, classified in class 530, subclass 387.1.
52. Claims 11 and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:33, classified in class 530, subclass 387.1.

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53. Claims 11 and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:35, classified in class 530, subclass 387.1.
54. Claims 11 and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:37, classified in class 530, subclass 387.1.
55. Claims 11 and 12, drawn to an antibody that binds a polypeptide comprising SEQ ID NO:39, classified in class 530, subclass 387.1.
56. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:6, classified in class 435, subclass 7.1.
57. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:8, classified in class 435, subclass 7.1.
58. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:10, classified in class 435, subclass 7.1.
59. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:12, classified in class 435, subclass 7.1.
60. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:14, classified in class 435, subclass 7.1.
61. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:16, classified in class 435, subclass 7.1.
62. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:18, classified in class 435, subclass 7.1.
63. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:20, classified in class 435, subclass 7.1.

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64. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:22, classified in class 435, subclass 7.1.
65. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:24, classified in class 435, subclass 7.1.
66. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:26, classified in class 435, subclass 7.1.
67. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:28, classified in class 435, subclass 7.1.
68. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:29, classified in class 435, subclass 7.1.
69. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:31, classified in class 435, subclass 7.1.
70. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:33, classified in class 435, subclass 7.1.
71. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:35, classified in class 435, subclass 7.1.
72. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:37, classified in class 435, subclass 7.1.
73. Claim 13, drawn to a method of detecting antibodies utilizing a polypeptide comprising SEQ ID NO:39, classified in class 435, subclass 7.1.

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74. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:6, classified in class 435, subclass 7.1.
75. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:8, classified in class 435, subclass 7.1.
76. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:10, classified in class 435, subclass 7.1.
77. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:12, classified in class 435, subclass 7.1.
78. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:14, classified in class 435, subclass 7.1.
79. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:16, classified in class 435, subclass 7.1.
80. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:18 classified in class 435, subclass 7.1.

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81. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:20 classified in class 435, subclass 7.1.
82. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:22 classified in class 435, subclass 7.1.
83. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:24 classified in class 435, subclass 7.1.
84. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:26, classified in class 435, subclass 7.1.
85. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:28, classified in class 435, subclass 7.1.
86. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:29, classified in class 435, subclass 7.1.
87. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:31, classified in class 435, subclass 7.1.

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88. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:33, classified in class 435, subclass 7.1.
89. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:37, classified in class 435, subclass 7.1.
90. Claim 14, drawn to a method of detecting polypeptides utilizing an antibody that binds polypeptides comprising SEQ ID NO:39, classified in class 435, subclass 7.1.
91. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:8, classified in class 435, subclass 7.24.
92. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:10, classified in class 435, subclass 7.24.
93. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:12 classified in class classified in class 435, subclass 7.24.
94. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:14 classified in classified in class 435, subclass 7.24.

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95. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:16, classified in class 435, subclass 7.24.
96. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:18, classified in class 435, subclass 7.24.
97. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:20, classified in class 435, subclass 7.24.
98. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:22, classified in class 435, subclass 7.24.
99. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:24, classified in class 435, subclass 7.24.
100. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:26, classified in class 435, subclass 7.24.
101. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:28, classified in class 435, subclass 7.24.

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102. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:29, classified in class 435, subclass 7.24.
103. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:31, classified in class 435, subclass 7.24.
104. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:33, classified in class 435, subclass 7.24.
105. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:35, classified in class 435, subclass 7.24.
106. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:37, classified in class 435, subclass 7.24.
107. Claim 15, drawn to a method of detecting cell mediated immune reactivity utilizing polypeptides comprising SEQ ID NO:39, classified in class 435, subclass 7.24.
108. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:6, classified in class 424, subclass 248.1.

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109. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:8, classified in class 424, subclass 248.1.
110. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:10, classified in class 424, subclass 248.1.
111. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:12, classified in class 424, subclass 248.1.
112. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:14, classified in class 424, subclass 248.1.
113. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:16, classified in class 424, subclass 248.1.
114. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:18, classified in class 424, subclass 248.1.
115. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:20, classified in class 424, subclass 248.1.

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116. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:22, classified in class 424, subclass 248.1.
117. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:24, classified in class 424, subclass 248.1.
118. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:26, classified in class 424, subclass 248.1.
119. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:28, classified in class 424, subclass 248.1.
120. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:29, classified in class 424, subclass 248.1.
121. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:31, classified in class 424, subclass 248.1.
122. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:33, classified in class 424, subclass 248.1.

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123. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:35, classified in class 424, subclass 248.1.
124. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:37, classified in class 424, subclass 248.1.
125. Claims 18 and 20, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polypeptides comprising SEQ ID NO:39, classified in class 424, subclass 248.1.
126. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:8, classified in class 514, subclass 44.
127. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:10, classified in class class 514, subclass 44.
128. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:12, classified in class 514, subclass 44.
129. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:14, classified in class 514, subclass 44.

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130. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:16, classified in class 514, subclass 44.
131. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:18, classified in class 514, subclass 44.
132. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:20 classified in class class 514, subclass 44.
133. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:22 classified in class class 514, subclass 44.
134. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:24 classified in class class 514, subclass 44.
135. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:26, classified in class 514, subclass 44.
136. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:28, classified in class 514, subclass 44.

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137. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:29, classified in class class 514, subclass 44.
138. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with polynucleotides that encode for polypeptides comprising SEQ ID NO:6, classified in class class 514, subclass 44.
139. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with vectors containing polynucleotides that encode for polypeptides comprising SEQ ID NO:31, classified in class 514, subclass 44.
140. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with vectors containing polynucleotides that encode for polypeptides comprising SEQ ID NO:33, classified in class 514, subclass 44.
141. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with vectors containing polynucleotides that encode for polypeptides comprising SEQ ID NO:35, classified in class 514, subclass 44.
142. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with vectors containing polynucleotides that encode for polypeptides comprising SEQ ID NO:37, classified in class 514, subclass 44.
143. Claim 19, drawn to a method of treating or preventing mycobacterial disease comprising vaccinating with vectors containing polynucleotides that encode for polypeptides comprising SEQ ID NO:39, classified in class 514, subclass 44.

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144. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:8, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
145. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:10, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
146. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:12, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
147. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:14, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
148. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:16, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
149. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:18, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
150. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:20, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..

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151. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:22, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
152. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:24, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
153. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:26, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
154. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:28, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
155. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:29, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
156. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:31, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
157. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:33, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..

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158. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:35, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
159. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:37, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..
160. Claims 21-23, drawn to a mycobacterium whose pathogenicity is mediated by the presence or expression of a polypeptide comprising SEQ ID NO:39, and vaccines comprising said mycobacterium, classified in class 435, subclass 253.1 e.g..

The inventions are distinct, each from the other because of the following reasons:

Inventions 1-55 and 144-160 are each separate and distinct from each other, as they comprise differing biochemical and physical entities having differing properties and uses.

Inventions 56-143 are separate and distinct from each other as they are each drawn to differing methods having different goals and different reagents and leading to differing results.

Inventions 1-13 are each related to Inventions 56-73 and 91-125 as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the polypeptides of Inventions 1-13 can be used in other methods such as binding studies.

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Inventions 14-25 are each related to Inventions 126-143 as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the polynucleotides Inventions 14-25 can be used in other methods such as *in vitro* protein synthesis.

Inventions 38-55 are each related to Inventions 74-90 as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the antibodies of Inventions 38-50 can be used in other methods such as protein purification.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert A Zeman whose telephone number is (703) 308-7991. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm and Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, Donna Wortman, Primary Examiner, can be reached on (703) 308-1032. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.



DONNA WORTMAN
PRIMARY EXAMINER

Robert A. Zeman
August 22, 2002